

REMARKS

Claims 1-14, 21-29, 33-36, and 38-45 are pending in this application. Of these, claims 1, 21, 29, 33, 38, 40, 42, and 44 are independent. Claims 15-20, 30-32, and 37 have been cancelled. Favorable reconsideration and further examination are respectfully requested.

In the Office Action of September 15, 2005, claim 29 was rejected under 35 U.S.C. 112, second paragraph. Applicants have amended claim 29 to clearly recite "An apparatus". As such, withdrawal of the §112 rejection is respectfully requested.

Turning to the art rejections, claims 1-8, 10-14, 21-29, 33, and 40-45 were rejected under 35 U.S.C. 102(b) over Herz et al. (U.S. Pat. 5,835,087). Claims 9 and 34-36 were rejected under 35 U.S.C. 103(a) over Herz. As shown above, Applicants have amended the claims to define the invention with greater clarity. In view of these clarifications and the arguments below, reconsideration and withdrawal of the art rejections are respectfully requested.

Claim 1 has been amended to recite "a computer-implemented popularity predicting process for estimating a popularity of a text-based object, comprising a query analysis process for analyzing a query of the text-based object to determine a plurality of links to Internet objects relating to the query, wherein the plurality of links comprises connections between the text-based object and the Internet objects ..."

Herz neither discloses nor suggests the features of the popularity predicting process recited in claim 1, particularly with respect to analyzing a query of the text-based object to determine a plurality of links to Internet objects relating to the query, wherein the plurality of

links comprise connections between the text-based object and the Internet objects; determining the individual link strength of each of the plurality of links; and determining the sum of the plurality of link strengths.

In this regard, a description of a process for estimating the popularity figure of a target object in Herz's FIG. 12 and accompanying text in col. 18 -19 does not disclose or suggest analyzing a query of the target object to determine links comprising connections between the target object and other objects. For example, item 1201 of the process shown in FIG. 12 and the accompanying text in col. 18, lines 46-50, describe selecting certain designated numeric attributes (termed "quality attributes") of the target object to be analyzed:

The computation process begins at step 1201, where certain designated numeric attributes of target object X are specifically selected, which attributes by their very nature should be positively or negatively correlated with users' interest. Such attributes, termed "quality attributes," have the normative property that the higher (or in some cases lower) their value, the more interesting a user is expected to find them.

The quality attributes are nowhere disclosed nor suggested to be links providing connections between the target object and other objects. Rather, the quality attributes are numeric values associated with properties of the target object (e.g., a rating assigned to the target object by a particular reviewer).

Furthermore, the quality attributes are not determined from a query of the target object. In col. 4, lines 59-62, Herz defines a query, also referred to as a "query profile", as a "profile consisting of a collection of attributes, such that a user likes target objects whose profiles are similar to this collection of attributes" in which, according to col. 66, lines 57-59, "the attributes are explicitly specified by the user." Thus, a query, as defined by Herz, includes only those attributes specified by the user, for which a user has a preference. Although the foregoing

passage related to item 1201 of FIG. 12 discloses that the quality attributes are specifically selected, it provides no clue as to whether the user or some other person or entity selects the attributes. Furthermore, the following passage of col. 18, lines 60-65, suggests that the user may lack a preference or have a negative preference for some of the quality attributes:

At step 1202, each of the selected attributes is multiplied by a positive or negative weight indicative of the strength of user U's preference for those target objects that have high values for this attribute, which weight must be retrieved from a data file storing quality attribute weights for the selected user.

As such, in step 1201, Herz does not teach a query analysis for analyzing a query of a text-based data object in the context of a popularity predicting process for estimating the popularity of the text-based object. Furthermore, this feature is not disclosed or suggested anywhere else in Herz.

According to the foregoing passage, step 1202 clearly teaches assigning weights to the quality attributes, which, as shown in the foregoing arguments, are not links comprising connections between the target object and other objects. Nowhere does Herz disclose or suggest a link weighting process for determining the individual link strength of each of the plurality of links as required by claim 1.

In the previous office action, filed on June 23, 2005, Applicants argued that Herz does not disclose summing the strengths related to links of different (i.e., a plurality) objects, but rather teaches summing weighted values of attributes of the same target object. In response to Applicants' arguments, the Examiner states on page 6 of the office action that the "Applicants' argument that Herz does not sum the strengths related to links to different objects is irrelevant and unpersuasive."

Applicants respectfully submit that Herz's lack of disclosure of a link strength summing process for determining a sum of a plurality of link strengths of links comprising connections

between text-based objects and Internet objects and lack of disclosure of other elements of claim 1 is highly relevant. According to section 2131 of the MPEP regarding the application of 35 U.S.C. 102(a), to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In this regard, in col. 18, lines 65-66, Herz clearly states that step 1203 sums the weights assigned to attributes of the same object: "At step 1203, a weighted sum of the identified weighted selected attributes is computed." Furthermore, a link strength process for determining a sum of a plurality of link strengths associated with links is neither disclosed nor suggested anywhere else in Herz.

The method, as recited in claim 1, can estimate the popularity of an object that has never before been seen or accessed by any user (e.g., a newly created object) by using the object itself as a query. Herz's estimation process, by contrast, relies upon feedback provided by other users who have previously accessed the object. In particular, in col. 20, lines 39-43, Herz states:

Notice that user U's interest can be estimated even if user U is a new user or an off-line user who has never provided any feedback, because the relevance feedback of users whose attributes are similar to U's attributes is taken into account.

There is nothing in Herz that describes estimating the popularity of a new object for which no circulation figures, feedback, replies, or any other popularity metrics have been previously provided. Rather, Herz discloses in col. 20, lines 44-56, that in the absence of any user feedback, the system makes the "presumption of no topical interest." Thus, Herz would assign a popularity figure of zero to any never-before-seen or newly created object.

For at least the foregoing reasons, independent claim 1 is believed to distinguish over Herz. Independent claims 21, 29, 33, 40, 42, and 44 recite limitations that are similar to the limitations of claim 1. Accordingly, for at least the foregoing reasons, independent claims 21, 29, 33, 38, 40, 42, and 44 are also believed to distinguish over Herz.

Each of the dependent claims is also believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, has not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claims, except as specifically stated in this paper, and the amendment of any claims does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney can be reached at the address shown below. All telephone calls should be directed to the undersigned at 617-521-7896.

While no fees are believed to be due at this time, please apply any charging deficiencies or credits to deposit account 06-1050 referencing Attorney Docket No. 10984-536001.

Applicants : Andrew Golding et al.
Serial No. : 09/902,422
Filed : July 10, 2001
Page : 19 of 19

Attorney's Docket No.: 10984-536001
Client Ref.: P264

Respectfully submitted,

Date: December 15, 2005



Paul A. Pysher
Reg. No. 40,780

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906